SWM ✓ 12/4
JHI 12/4
PKB 12/15
MRG
RC

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
CHATTANOOGA ENVIRONMENTAL FIELD OFFICE
DIVISION OF WATER POLLUTION CONTROL
540 MCCALLIE AVENUE, SUITE 550
CHATTANOOGA, TN 37402
PHONE 423-634-5745 STATEWIDE 1-888-891-8332 FAX 423-634-6389

file: SE.TN.R.C.F. 2009 (Bledsoe)

December 4, 2009

Mr. Greg Steck
Tennessee Department of Finance and Administration
Tennessee Tower, 22nd Floor
312 8th Avenue North
Nashville, TN 37243

permit

Subject: **NPDES Construction General Permit Tracking No. TNR111721**
Southeastern Tennessee State Regional Correctional Facility (also known as Bledsoe County Correctional Complex)
Pikeville, Bledsoe County, Tennessee

Dear Mr. Steck:

The Division of Water Pollution Control (the division) acknowledges receipt of the Notice of Intent (NOI) form for the above referenced project. The NOI was received on January 13, 2009. The NOI was submitted to obtain coverage under a General NPDES Permit for Storm Water Discharges Associated with Construction Activity.

A review of the submitted form showed that the NOI was incomplete. We have assigned this project NPDES Permit tracking number TNR111721. No discharges of storm water associated with construction activity are authorized by the general permit until the completed NOI is submitted and Notice of Coverage (NOC) issued by the division.

Storm Water Pollution Prevention Plan (SWPPP)

The division acknowledges receipt of your SWPPP as fulfillment of the SWPPP submittal requirement for this construction site. However, the SWPPP was found not to satisfy requirements stated in part 3 of the General Permit. (see attached SWPPP review)

Contractor Information

As of the date this NOI was processed, no contractor was identified on the NOI. A primary contractor, or contractor otherwise responsible for sediment and erosion controls on the construction site, must be identified and must submit an NOI to this office prior to beginning earth clearing operations on site. When submiting the NOI, the contractor should indicate on the NOI form the above referenced permit tracking number.

Exceptional (High Quality) Waters

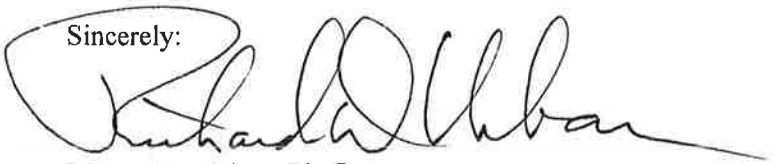
The receiving stream for a construction site for which the NOI was submitted appears on the state's list of exceptional (high quality) waters, as identified by TDEC. Since the discharge from the proposed construction site may contain significant amounts of silt, the division considers the potential for degradation to the receiving stream from the discharge to be significant. Therefore, additional pollution prevention requirements, as described in the General Permit, Subpart 4.4., for discharges into exceptional (high quality) waters apply to your construction site; requirements of Section 4.4.2. apply to your construction site only if an exceptional (high quality) water is located on or adjacent to the disturbed area.

Threatened and Endangered Species

The receiving stream for a construction site for which the NOI was submitted has Federal or State listed threatened and endangered species in the area, or downstream of your project. Storm water discharges and storm water discharge-related activities that are not protective of legally protected listed or proposed threatened or endangered aquatic fauna in the receiving stream; or discharges or activities that would result in a 'take' of a Federally listed endangered or threatened fish or wildlife species are not authorized by the General Permit. If the division finds that storm water discharges or storm water related activities are likely to result in any of the above effects, the division will deny the coverage under this general permit unless and until project plans are changed to protect the listed species. In addition, discharges from your construction site that result in harm to such species may incur additional fines and penalties from the US Fish and Wildlife Service and/or the Tennessee Wildlife Resources Agency.

We appreciate your attention to the general construction storm water permit and its requirements. We believe this does make a difference to the quality of state waters. If you have any questions, please contact Mr. Steve Morse at (423) 634-5704 or by e-mail at *steve.morse@tn.gov* .

Sincerely:



Richard D. Urban, Ph. D.
Field Office Manager, Division of Water Pollution Control
Chattanooga Environmental Field Office

Enclosure: SWPPP review

CC: DWPC, Chattanooga EFO Permit File
Mr. Bryan Mills, Adams Craft Herz Walker, Inc., 800 Oak Ridge Turnpike, Suite A-400, Oak Ridge, TN 37830-6988

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER POLLUTION CONTROL
STORM WATER POLLUTION PREVENTION PLAN review

DATE: **December 2, 2009**

TO: Bryan Mills, ACHW, 800 Oak Ridge Turnpike, Suite A-400, Oak Ridge, TN 37830-6988

Cc: Greg Steck, Department of Finance & Administration, 312 Rosa L. Parks Blvd, North, Suite 2200, Nashville, TN 37243

FROM: Steve Morse, Chattanooga Environmental Assistance Center

SUBJECT: **Bledsoe County Correctional Complex Expansion**
NPDES Permit Tracking No. TNR111721
Mill Creek /Bee Creek watershed, Bledsoe County, TN

On November 10, 2009, the Division of Water Pollution Control, Chattanooga Environmental Field Office, received a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) for the referenced construction project. According to the Tennessee Construction General Permit (TNCGP), construction projects where over 50 acres of soil will be disturbed must be phased and that no more than 50 acres of active soil disturbance is allowed at any one time during the construction project. The NOI indicates that approximately 90 acres will be disturbed during this project. **If the maximum 50 acre limit of disturbed soil at any one time cannot be adhered to, an individual construction permit will be required.**

The submitted SWPPP is limited to construction activity associated with; 1) the geothermal/construction trailer site, 2) the water tower site, 3) a new warehouse, and 4) expansion of the Minimum/Medium & Maximum security areas. Other construction activity associated with this project though not addressed in the submitted SWPPP include the ARAP and mitigation site, the sewage treatment plant and collective system, construction associated with the transmission lines and construction of a proposed water line.

Bee Creek and Glade Creek are listed as 'Exceptional Tennessee Waters' due to the presence of the Bledsoe State Forest and a threatened crayfish species. Therefore, additional SWPPP requirements apply such as chemical treatment of storm water runoff, buffer zones and sediment basin(s) required for drainage areas of 5 or more acres based on 5 year/24 hour storm events.

The following deficiencies were noted during my review of the SWPPP and should be incorporated in a revised plan.

NARRATIVE

1) No data describing the soil was provided.
2) The name of the 'certified' individual conducting erosion control inspections was not provided.
3) Statements provided in the narrative should include; a) erosion control measures must be in place and functional before earth moving operations begin, b) muddy water to be pumped from work areas must be treated prior to being discharged into surface waters, c) pre-construction vegetative cover will not be destroyed, removed or disturbed more than 10 days prior to grading or earth moving activity, d) off-site accumulations of sediment that have not reached a stream must be removed at a frequency sufficient to minimize any offsite impacts

and c) velocity dissipation devices shall be placed at the discharge location and along the length of any outfall channel.

PLAT(S)/SITE MAP

1) A site map with existing contours must be provided showing watershed drainage patterns and total acreage drained.
2) A preliminary plat identifying initial BMP's based on the drainage maps and acres drained. This plat should include erosion control measures such as construction exits, sediment basins/traps, diversion ditches to convey on-site storm water runoff into the basins/traps, perimeter silt fencing (on contour), 'limits of construction', water features designated as 'waters of the State' (including wetlands), appropriate buffer zones and outfalls intended for coverage under the Tennessee Construction General Permit (TNCGP).
3) A grading plan showing proposed cut/fill slopes, 'construction road stabilization', appropriately spaced rock check dams on road side ditches and wet weather conveyances (as necessary), temporary /permanent stabilization on disturbed areas and inlet /outlet protection on culverts.
4) Intermediate construction phase with building layout, storm drains identified with inlet/outlet protection, temporary /permanent stabilization, etc.
5) Final construction phase identifying post development water quality control measures and permanent stabilization.

Note: Erosion prevention and sediment control measures can not be installed in 'waters of the state'. The existing pond identified on Sheet C5.03 as a 'sediment basin during construction' has a ground water connection and is considered 'water of the state'.

Specific information on the sediment basins/traps should include wet, dry and total storage capacities (bottom of pond to top of dry storage) based on a 5 yr / 24 hr storm event, elevations of the basin/trap bottom, top of wet storage, top of dry storage, emergency over flow, top of berm and a cross section of the outlet structure and emergency overflow. Each basin should utilize a 'faircloth' skimmer or equivalent measure to meet a recommended 72-hour dry storage drawdown time and arrangements should be made to treat each basin/trap with a polyacrylamide to enhance the removal of suspended solids.

SWM 6-12
JHT 6/29
PKB 7/1
MRG

QE²

Quantum Environmental & Engineering Services, LLC.
126 Dante Road
Knoxville, Tennessee 37918

Telephone (865) 689-1395 Fax (865) 689-6844

Permit Info

Letter of Transmittal

Date: 02-25-09	Job No. 500619.000.000
Attention: Mr. Richard D. Urban, Ph.D.	
Subject: Southeastern Tennessee State Regional Correctional Facility Expansion - Bledsoe County	

fee - SE TRCF 2009 (Bledsoe)

To:
Tennessee Department of Environment and Conservation
State Office Building, Suite 550
540 McCallie Avenue
Chattanooga, TN 37402

WE ARE SENDING YOU

- ☐ Shop Drawings
- ☐ Copy of Letter
- ☒ Attached
- ☐ Prints
- ☐ Change Order
- ☐ Under separate cover via _____ the following items:
- ☐ Plans ☐ Samples ☐ Specifications
- ☐ _____

COPIES	LAST DATE	NO.	DESCRIPTION
1		1	Responses To TDEC Comments (Comments Dated 02/02/09)
1		2	Revised Mitigation Area SWPPP Drawing C-1 dated 02/25/09
1		3	Revised Mitigation Area SWPPP Drawing C-2 dated 02/25/09
1		4	SWPPP Certification
1		5	Composite CN Calculation For Establishment Area
1		6	Site Map Showing Approximate Drainage To Site

THESE ARE TRANSMITTED AS CHECKED BELOW:

- ☒ For approval
- ☐ For your use
- ☐ As requested
- ☐ For review and comment
- ☐ For Bids Due _____ 20___
- ☐ No exception taken
- ☐ Make corrections noted
- ☐ Rejected
- ☐ Returned
- ☐ Revise and submit _ copies
- ☐ Submit ____ copies for distribution
- ☐ Return ____ corrected prints
- ☐ Prints Returned After Loan to Us

REMARKS:
This Letter of Transmittal will be emailed to Mike Lee and Greg Steck as proof of submittal to TDEC.

COPY TO: file (w/o) **Signed:** Karl J. Knoth, P.E.

500619.000.000

RECEIVED
FEB 27 2009
ENVIRONMENT & CONSERVATION
CHATTANOOGA FIELD OFFICE

Quantum Environmental &
Engineering Services, LLC

February 25, 2009

Mr. Richard D. Urban, Ph. D.
Field Office Manager, Division of Water Pollution Control
Chattanooga EFO
540 McCallie Avenue
Chattanooga, Tennessee 37402

Re: NPDES Construction General Permit Tracking No. TNR111721
Bledsoe County Correctional Complex Expansion/Mitigation
Pikeville, Bledsoe County, Tennessee

Dear Dr. Urban:

Please find attached the responses to your comments pertaining to the Mitigation Site SWPPP dated February 2, 2009. Your comments are repeated in bold type with Quantum Environmental & Engineering Services, LLC (QE^2) responses directly underneath. Let us know if you have any questions, comments or need additional information. Thank you for your time.

Sincerely,

Karl J. Knoth P.E.

c: QE^2 Project 500619

126 Dante Road Knoxville, Tennessee 37918 *phone*: 865.689.1395 *fax*: 865.689.6844 www.QE2LLC.com

Plan correctly signed by the operator(s) [3.3.1]

See attached SWPPP Certification signed by Greg Steck and dated 2/17/09. The contactor that will be performing the work will be determined at a later date and will sign the Notice of Intent and the SWPPP Certification then.

Runoff coefficient of the site after construction activities have completed [3.5.1]

See attached sheets and composite CN calculation taken from TR-55. The pre and post runoff numbers will not differ due to replacing the vegetation that will be removed to create the Establishment Area.

Procedures described to pick up exposed litter, debris, and chemicals before anticipated storm events [3.5.3]

Refer to revised SWPPP drawing C-1 provided, along with Note # 16 on the same drawing.

Offsite material storage used solely by the permitted project addressed

There will be no offsite storage related to the Mitigation Site. QE^2 has read Section 3.5.3.1., Part g of the General NDPES Permit and is aware of the additional SWPPP requirements if offsite storage for the Mitigation Site will be utilized in the future.

Methods describing dewatering practices (of muddy water) from excavation and work areas [3.5.3]

None of the construction proposed on the Mitigation Site will require dewatering practices. QE^2 has read Section 3.5.3.3. of the General NDPES Permit and is aware of the additional SWPPP requirements if dewatering practices are to be utilized for the Mitigation Site.

EPSC measures designed according to the size and slope of disturbed or drainage areas [3.5.3]

Additional notes:
SWPPP needs to show staging area and access road from the construction exit to the site along with necessary erosion controls.
Use double row wire backed silt fence and extend from "establishment area" to soil disposal area" providing protective corridor for equipment.

Refer to revised SWPPP drawing C-1 provided, along with Note # 19 on the same drawing.

Site map indicating watershed drainage patterns and acreage

See attached site map produced with XMap 3.5.
Locations where stabilization practices are expected to occur

Refer to revised SWPPP drawing C-1 provided, along with Note #18 on the same drawing.

Outfall points intended for coverage under the TNGCP identified

Per a QE[2] conversation with Steve Morse on 02/12/09, this comment was deemed *"Not Applicable"*.

Appropriate controls and measures are identified covering the discharges from the support activity areas.

Refer to revised SWPPP drawing C-1 provided, along with Notes #18 & # 19 on the same drawing.

Show temporary/permanent stabilization (TS/PS) on the plat

Refer to revised SWPPP drawing C-1 provided, along with Note #18 on the same drawing.

Show temporary diversion above establishment area and provide details.

Refer to revised SWPPP drawings C-1 & C-2 provided, along with Note #17 on C-1 and the additional note located on C-2. The temporary diversion will come from the splitter pond initially being built to *not allow* flow to enter the diversion swale or the Establishment Area until both have become permanently stabilized. Once stabilized, an additional overflow weir will be placed in the splitter pond to allow flow to enter the stabilized diversion swale and Establishment Area.

Additional Comments and Revisions

Temporary Crossing at the Wet Weather Conveyance.

Refer to revised SWPPP drawing C-1 provided, along with Note #20 on the same drawing.

Stream Buffers

Per a QE[2] conversation with Steve Morse on 02/12/09, a twenty-five foot riparian stream buffer was added to each side of Existing Streams 1, 2 & 3. Refer to revised SWPPP drawing C-1 provided.

Exceptional (High Quality) Waters

There are no designated discharges (i.e. from a detention pond, sedimentation traps, etc.) planned for the mitigation site. Potential discharges from construction activities were addressed in a QE[2] conversation with Steve Morse on 02/12/09 and resulted in the installation of double rows of "Type C" silt fence utilized throughout the mitigation site.

Additionally, QE^2 has read Section 4.4. of the General NDPES Permit and is aware of the additional SWPPP requirements if additional discharges appear on the mitigation site.

Threatened and Endangered Species

There are no designated discharges (i.e. from a detention pond, sedimentation traps, etc.) planned for the mitigation site that would harm any Federal or State listed Endangered Species living within the mitigation site. Potential discharges from construction activities were addressed in a QE^2 conversation with Steve Morse on 02/12/09 and resulted in the installation of double rows of "Type C" silt fence utilized throughout the mitigation site.

Storm Water Pollution Prevention Plan Certification

General Information

The following certification is required under Section 6.7.2. – Signatory Requirements, contained within the State of Tennessee NPDES Permit.

Owner/Developer: State of Tennessee
Department of Finance & Administration
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Boulevard, North, Suite 2200
Nashville, TN 37243

Contact: Mr. Greg Steck
Phone: (615) 253-2160

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.		
Representative of owner/developer and title; print or type	Signature (must be signed by president, V.P. or equivalent, or ranking elected official)	Date
Gregory L Steck	Gregory L Steck	2/17/09

Primary Contractor: To Be Determined

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.		
Representative of owner/developer and title; print or type	Signature (must be signed by president, V.P. or equivalent, or ranking elected official)	Date

Table 2-2c Runoff curve numbers for other agricultural lands [1/]

Cover description		Curve numbers for hydrologic soil group			
Cover type	Hydrologic condition	A	B	C	D
Pasture, grassland, or range—continuous forage for grazing. [2/]	Poor	68	79	86	89
	Fair	49	69	79	84
	Good	39	61	74	80
Meadow—continuous grass, protected from grazing and generally mowed for hay.	—	30	58	71	78
Brush—brush-weed-grass mixture with brush the major element. [3/]	Poor	48	67	77	83
	Fair	35	56	70	77
	Good	30 [4/]	48	65	73
Woods—grass combination (orchard or tree farm). [5/]	Poor	57	73	82	86
	Fair	43	65	76	82
	Good	32	58	72	79
Woods. [6/]	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	30 [4/]	55	70	77
Farmsteads—buildings, lanes, driveways, and surrounding lots.	—	59	74	82	86

1 Average runoff condition, and $I_a = 0.2S$.
2 *Poor:* <50%) ground cover or heavily grazed with no mulch.
Fair: 50 to 75% ground cover and not heavily grazed.
Good: > 75% ground cover and lightly or only occasionally grazed.
3 *Poor:* <50% ground cover.
Fair: 50 to 75% ground cover.
Good: >75% ground cover.
4 Actual curve number is less than 30; use CN = 30 for runoff computations.
5 CN's shown were computed for areas with 50% woods and 50% grass (pasture) cover. Other combinations of conditions may be computed from the CN's for woods and pasture.
6 *Poor:* Forest litter, small trees, and brush are destroyed by heavy grazing or regular burning.
Fair: Woods are grazed but not burned, and some forest litter covers the soil.
Good: Woods are protected from grazing, and litter and brush adequately cover the soil.

Composite CN number due to B and C type soils being present on site.

$$CN_{(site)} = \overset{B}{(0.437)(69)} + \overset{C}{(0.563)(79)} = \boxed{74.6}$$

All graded areas will be immediately stabilized and no impervious will be introduced to the site. CN will stay essentially the same for pre & post development.

Soil Properties and Qualities

Soil Properties and Qualities— Summary by Map Unit — Bledsoe County, Tennessee				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
LyB	Lily loam, 2 to 6 percent slopes	B	5.5	14.1%
LyC	Lily loam, 6 to 12 percent slopes	B	11.5	29.6%
Mo	Morehead rarely flooded-Bonair occasionally flooded complex	C	21.9	56.3%
Totals for Area of Interest			**38.9**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

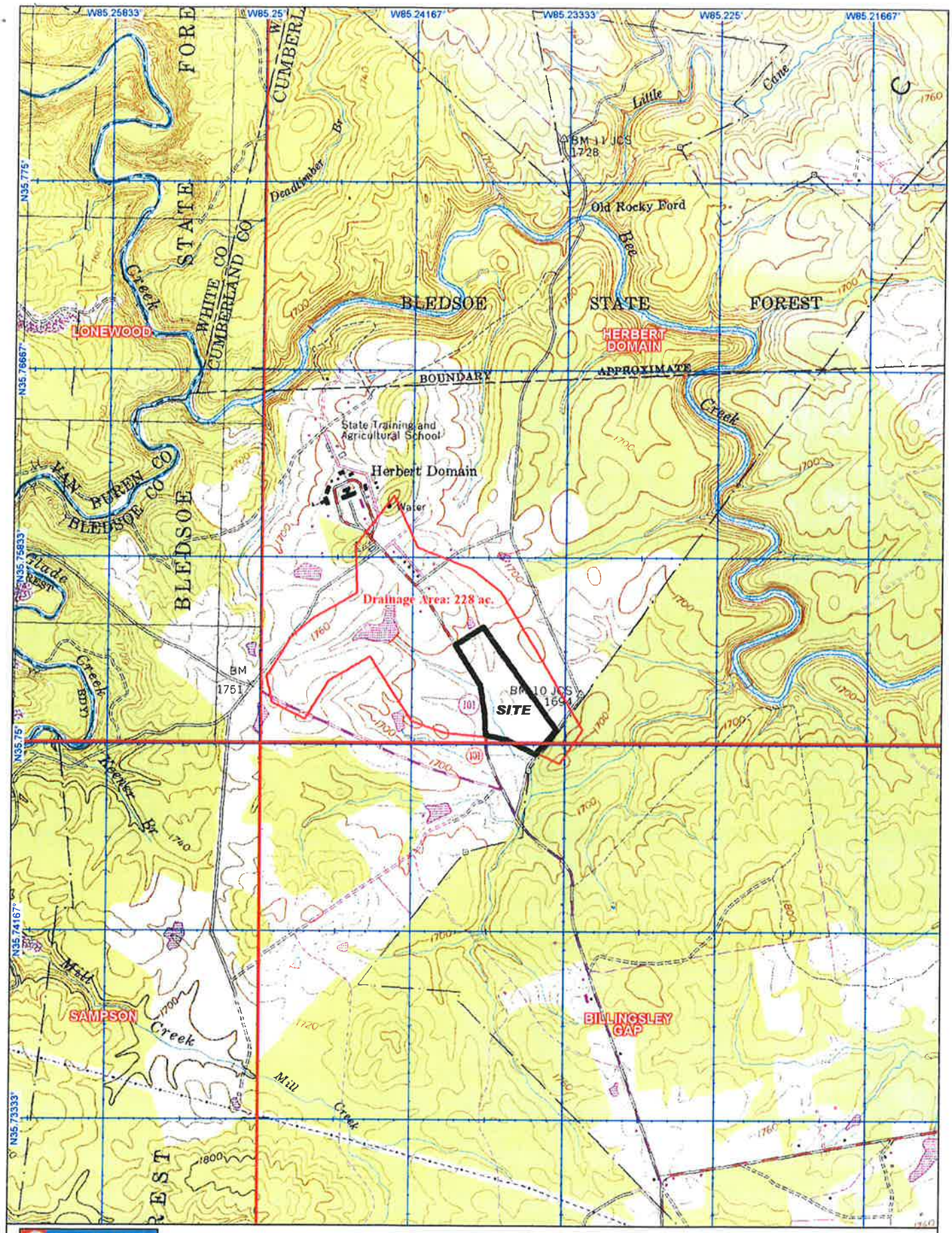
Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

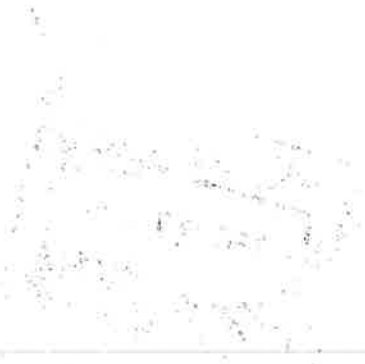


DeLORME

Zoom Level: 13-0 Datum: WGS84

Scale 1 : 25,000
1" = 2080 ft

TN
MN
3.4°W



Steve Morse - Bledsoe Co. Correctional Facility - Mitigation SWPPP

From: Steve Morse
To: kknoth@qe2llc.com
Date: 6/12/2009 8:34 AM
Subject: Bledsoe Co. Correctional Facility - Mitigation SWPPP
CC: Lee, Mike; Urban, Richard

Mr. Knoth,

I have reviewed the revised mitigation site SWPPP for the referenced construction project and found that the revisions addressed the deficiencies noted in the 2-2-09 incomplete letter. As you know, Mike Lee with the Division, Natural Resource Section, is reviewing the project and may have additional comments regarding the SWPPP or mitigation proposal that could impact the contents of this SWPPP.

I trust this e-mail provides adequate documentation as per your request. If you have any questions or need further assistance, feel fee to e-mail or call me at (423) 634-5704.

Steve Morse, Env. Specialist
Division of Water Pollution Control
Chattanooga Environmental Field Office